



Nuclear Weapons Status and Options Under a START Follow-On Agreement

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Presentation to

Arms Control Association Briefing

**Next Steps in U.S.-Russian Nuclear Arms Reductions:
The START Follow-On Negotiations and Beyond**

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Note: nuclear forces and warhead estimates in this briefing are based on research by the Federation of American Scientists and Natural Resources Defense Council



U.S. and Russian Nuclear Warhead Inventories



- Insane Cold War build-up: 70,000 intact warheads by mid-1980s
- US inventory peaked early (1967); Russia peaked late (1986)
- About 22,400 intact warheads left
- Tactical warheads dominated inventories; regional warfare focus
- Strategic warheads on both sides gradually build up through late 1980s
- SALT may have limited but did not reduce strategic warheads; end of Cold War and INF,/PNIs/START did
- SORT leaves large inventories



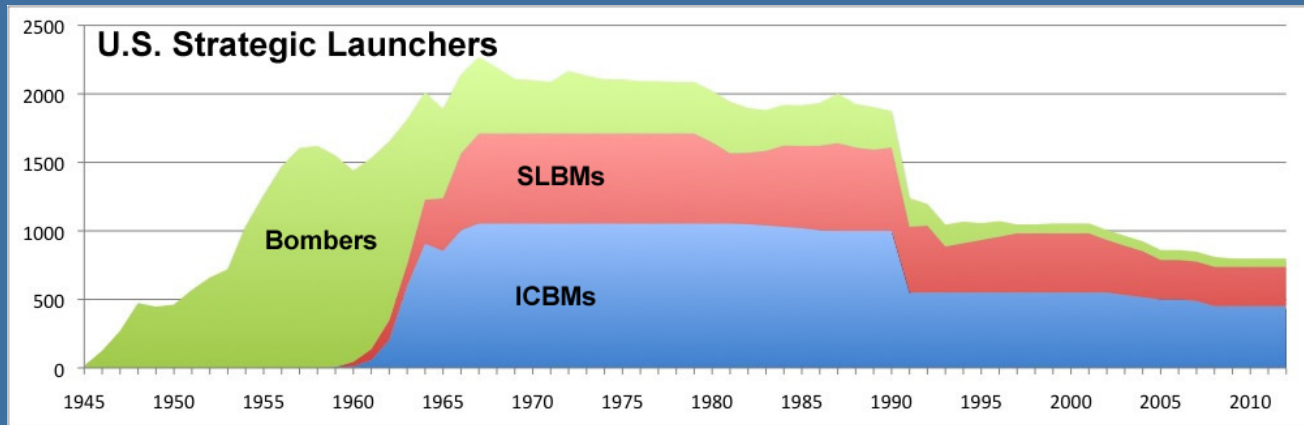
U.S. and Russian Nuclear Arsenals 2009

U.S. and Russian Nuclear Weapons 2009		
Weapons Category	United States	Russia
<i>Operational</i>	2,700	4,830
Strategic	2,200	2,780
Tactical	500	2,050
<i>Reserve</i>	2,500	(3,500)*
Total Stockpile	5,200	(8,330)*
Awaiting Dismantlement	4,200	(4,670)*
Total Inventory	9,400	13,000
* There are no reliable public estimates for the number of warheads in the Russian reserve, total stockpile, or awaiting dismantlement.		

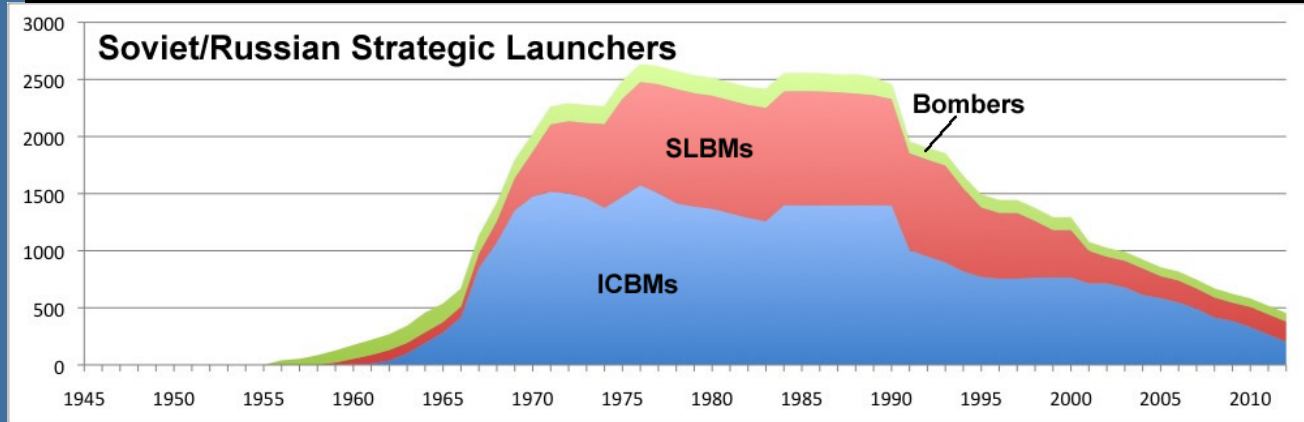
- Inventory of some 22,400 intact warheads
- Stockpiles with 13,500 warheads
- Some 6,000 warheads in reserve
- 8,870 warheads awaiting dismantlement
- U.S. has reached SORT limit
- Russia may soon have more tactical than strategic warheads (although tac nukes situation is highly unclear)
- More weapons are expected to disappear into reserve in near future
- Dismantlement numbers are secret; US backlog complete in 2021; Russian unknown



U.S. and Russian Strategic Delivery Vehicles



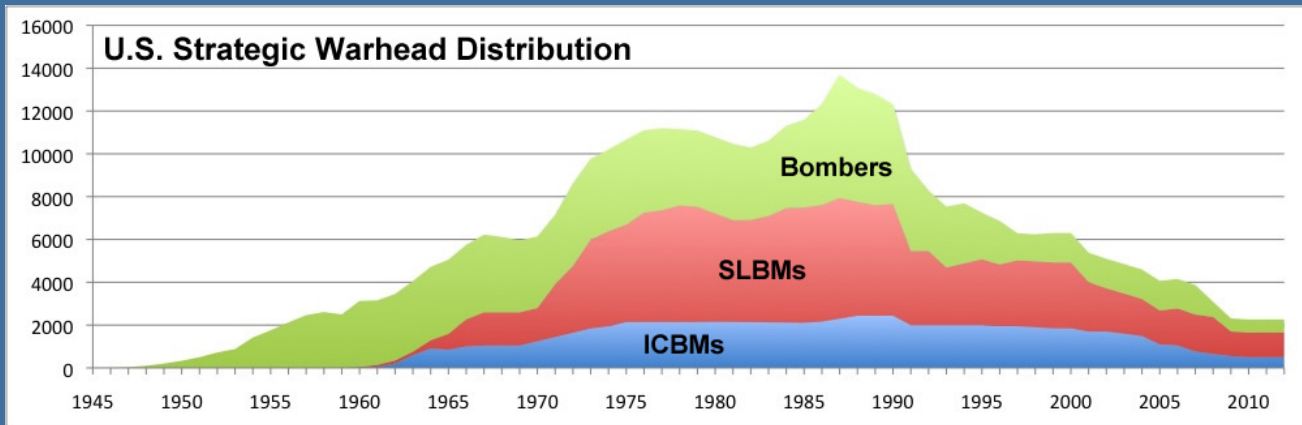
- Bomber-focus early but with sharp decline after 1991
- ICBM-focused after 1965
- SLBMs somewhat rebuilt after 1991 drop, but with
- Somewhat stabilized around 750 vehicles



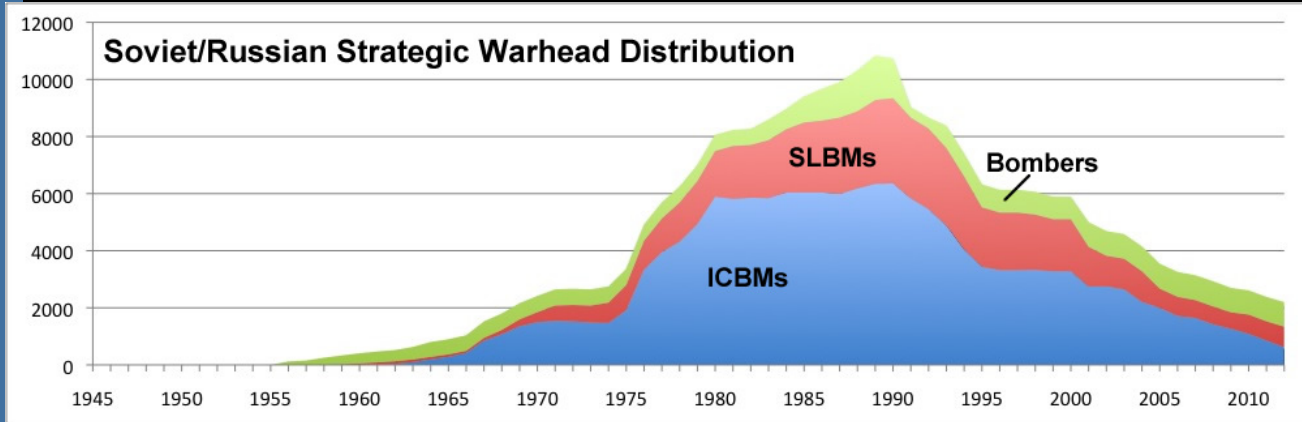
- ICBM-focused but with significant decline after 2000
- SLBMs sharply reduced after 1990s
- Bombers steady
- Heading toward less than 500 vehicles in 2012



U.S. and Russian Strategic Warhead Distribution



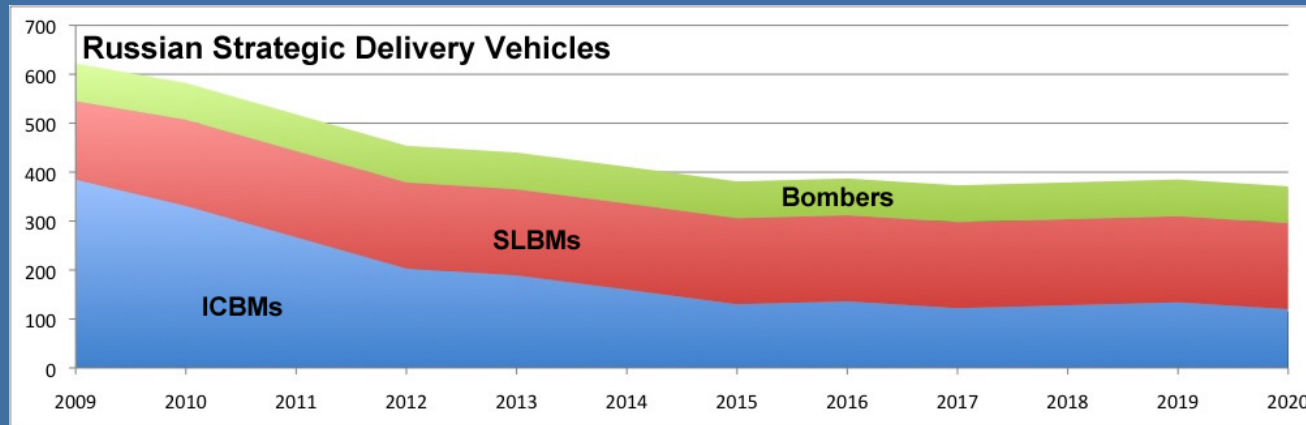
- SLBM-focused since MIRV
- Bombers historically second but significant decline since late-1990s
- ICBM never focus, now almost single-warhead load
- Future: sea-based focus



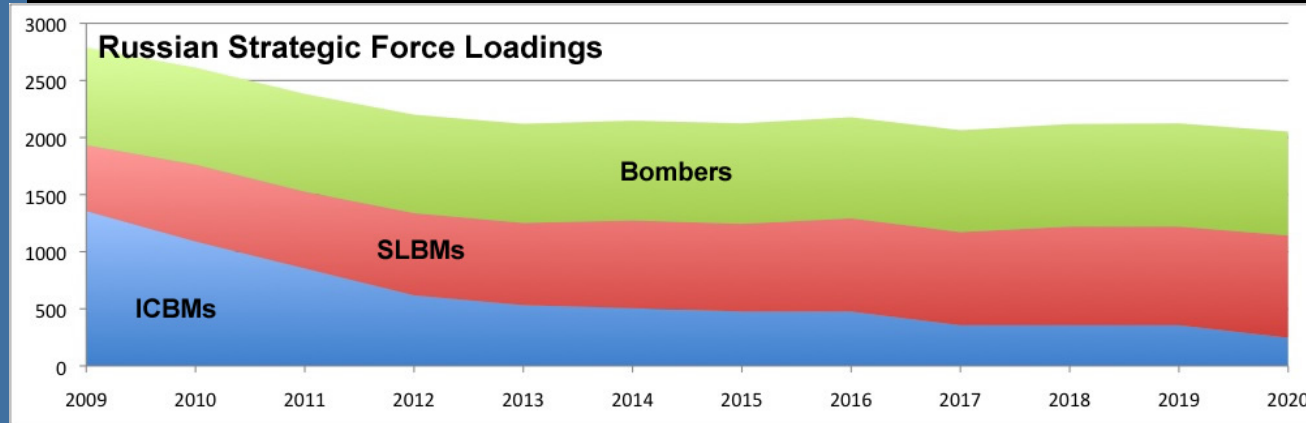
- ICBM-focused but with significant decline after 2000
- SLBM increase after 1980s, but decline after 2000
- Bombers relatively steady but with greater share coming
- Future: even split



Russian Strategic Warhead Projection



- ICBMs to drop below 200 to less than half of US ICBMs
- SLBMs increase slightly
- Bombers steady
- Shift from ICBM- to SLBM-focused posture



- New ICBM MIRV will compensate some but not offset SS-18/19 retirement
- SLBM warhead will increase by about 50 percent
- Bombers relatively steady
- Shift from ICBM- to SLBM-focused deployment



Options for Deeper Reductions

- Expected U.S. and Russian deployed strategic warhead levels relatively similar for 2010-2020 period; distribution on forces different, but good basis for joint reductions
- Possible force adjustments for SORT follow-on:
 - U.S. could reduce ICBM force by half to better match Russian ICBMs if...
 - Reinstate de-MIRVing of ICBMs (START II agreed)
 - Both countries should de-MIRV SLBMs and reduce SSBN fleet
 - Russia can reduce its bomber weapons significantly
 - Consider denuclearizing one leg of Triad
 - Both should declare total warhead inventory and dismantlement numbers
 - Get those tactical weapons under control!